

FIG. 1

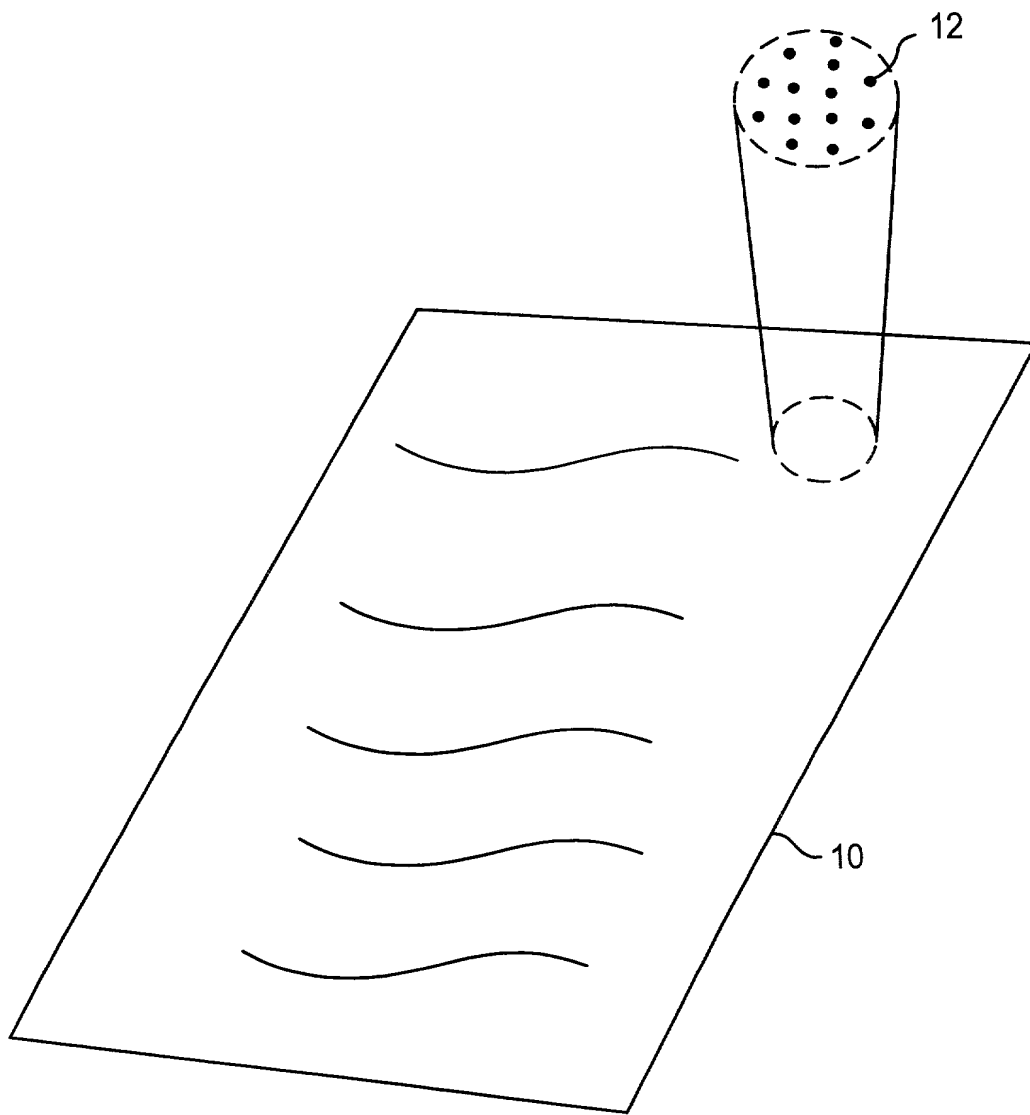
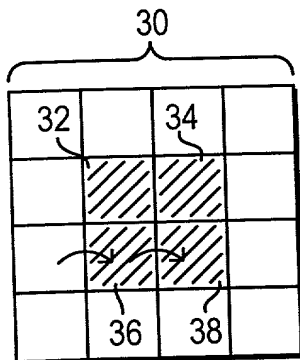
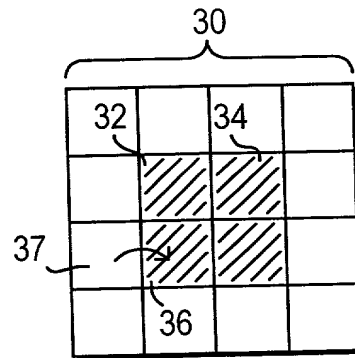
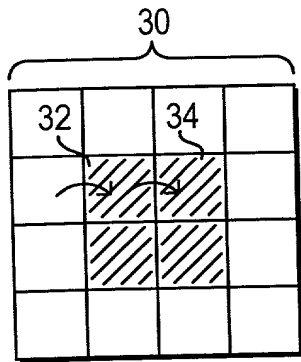
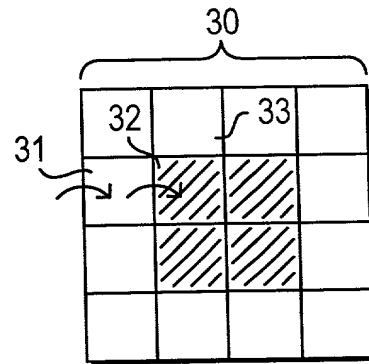
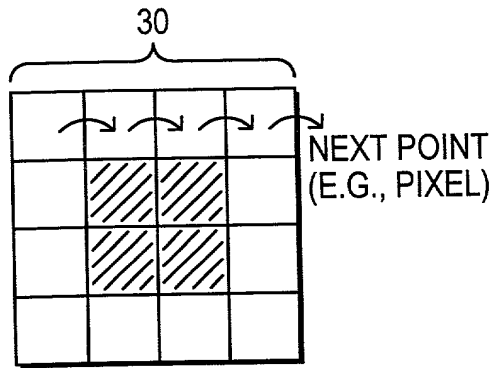


FIG. 2



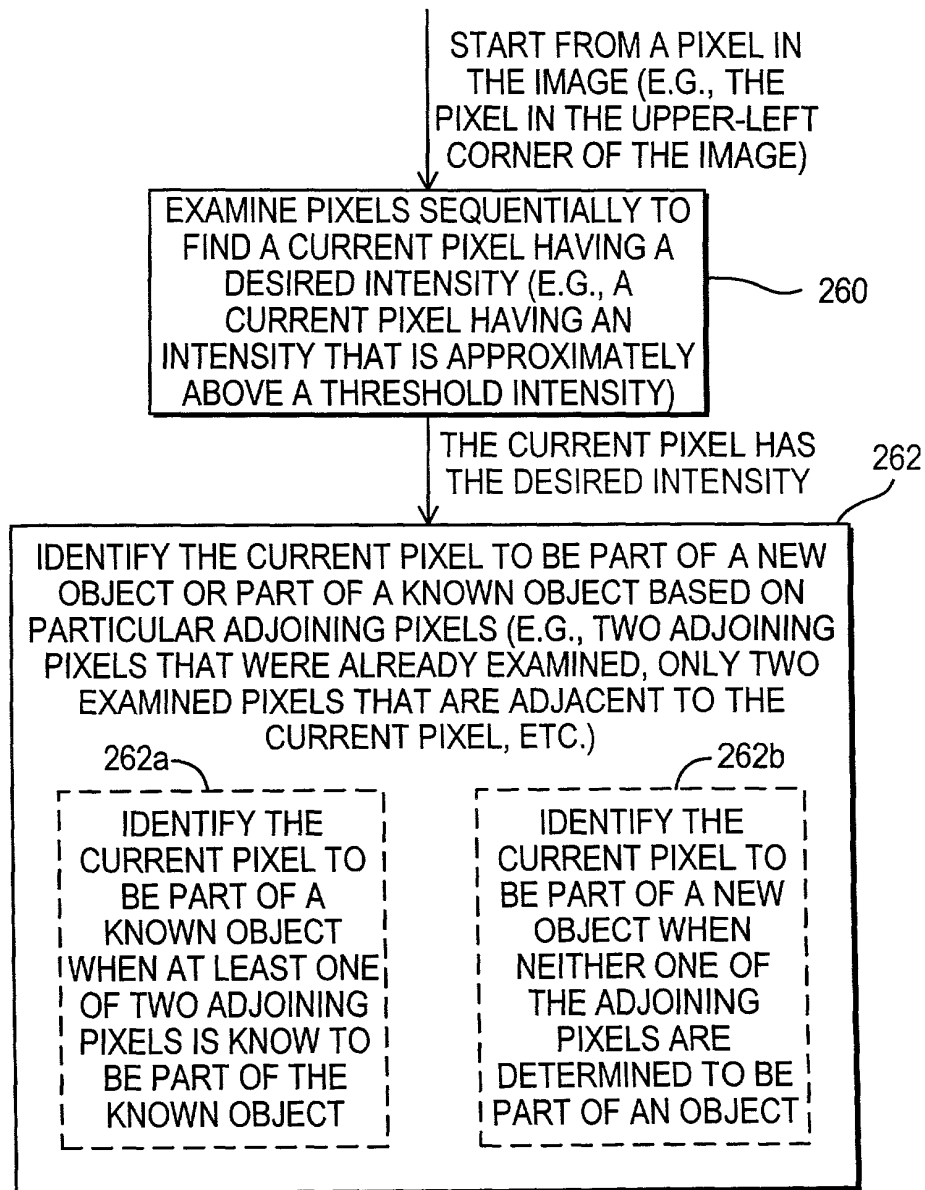
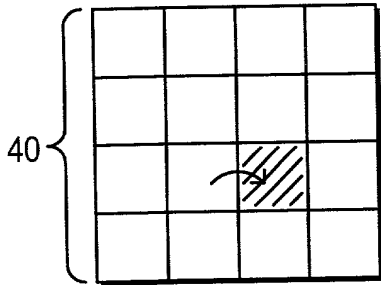
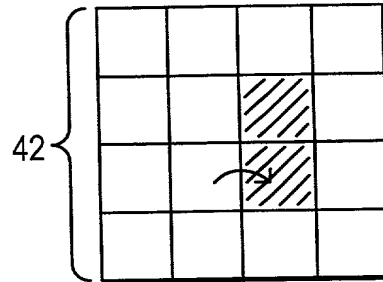


FIG. 3f



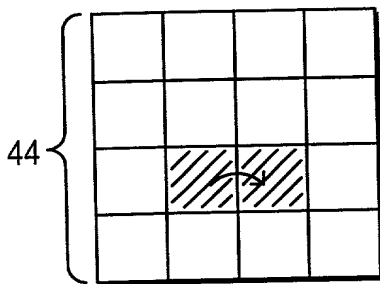
NEW SPOT

FIG. 4a



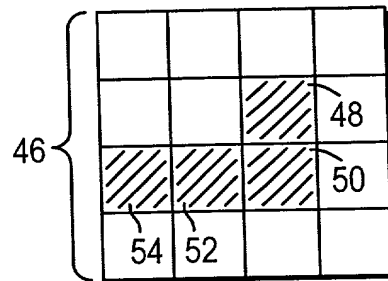
KNOWN SPOT

FIG. 4b



KNOWN SPOT

FIG. 4c



TWO KNOWN SPOTS

FIG. 4d

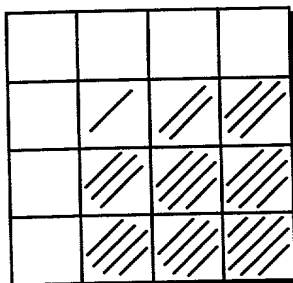
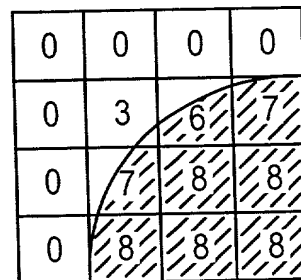


FIG. 4e



LIGHT INTENSITY RANGE

FIG. 4f

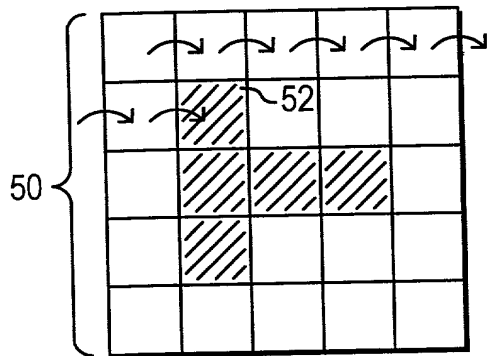


FIG. 5a

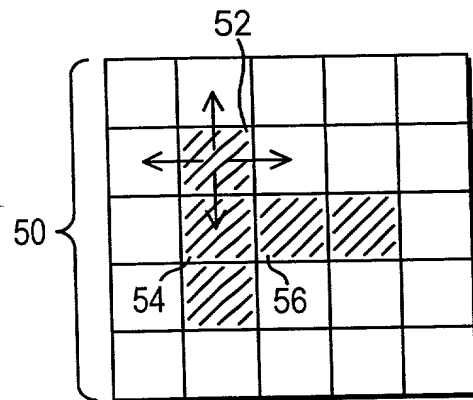


FIG. 5b

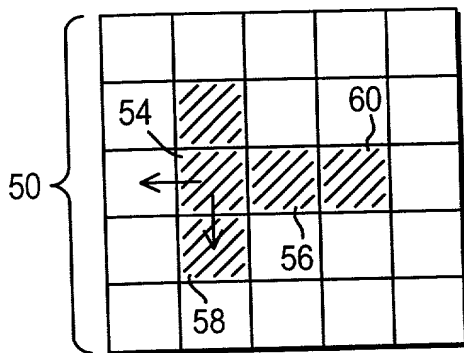


FIG. 5c

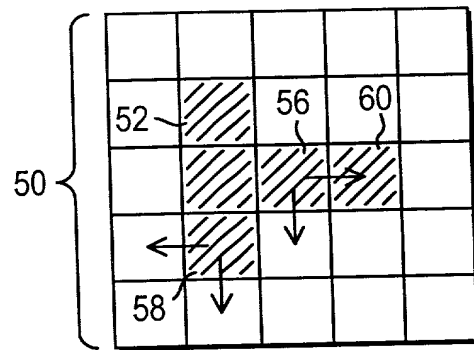


FIG. 5d

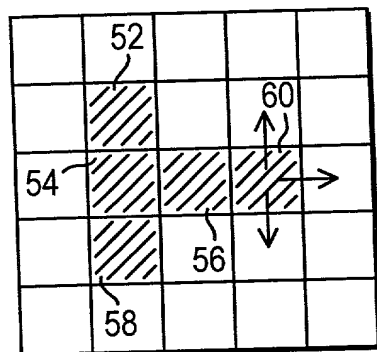


FIG. 5e

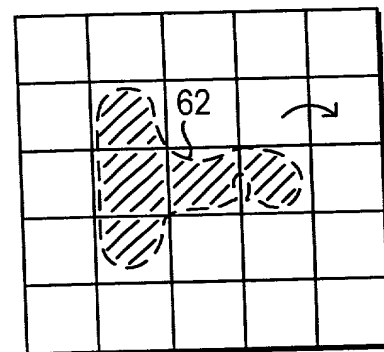


FIG. 5f

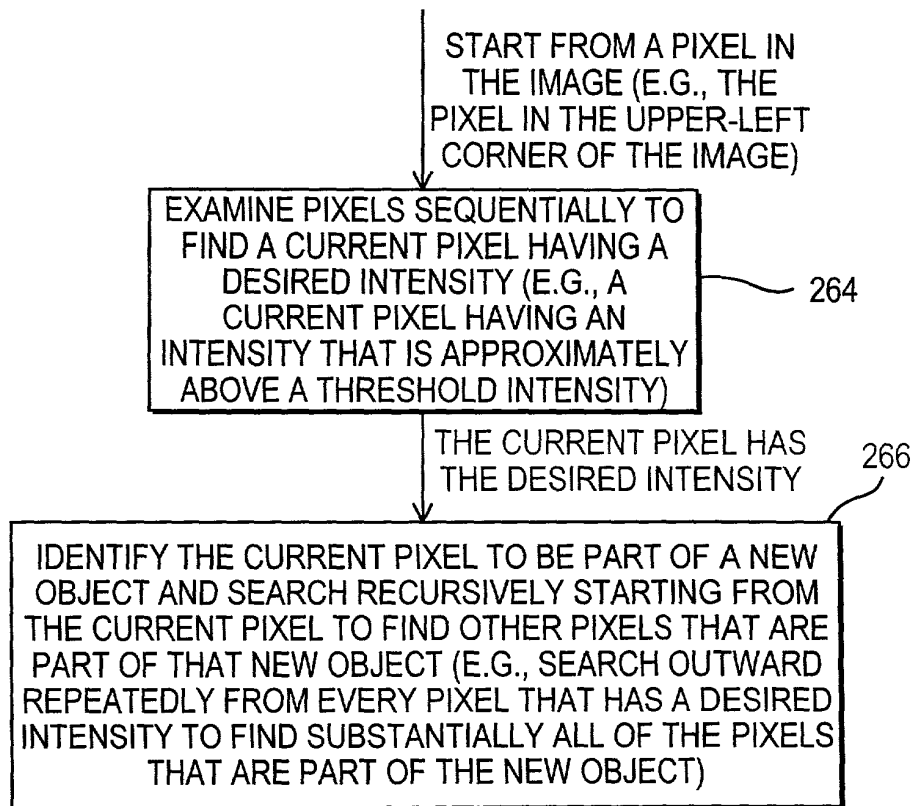
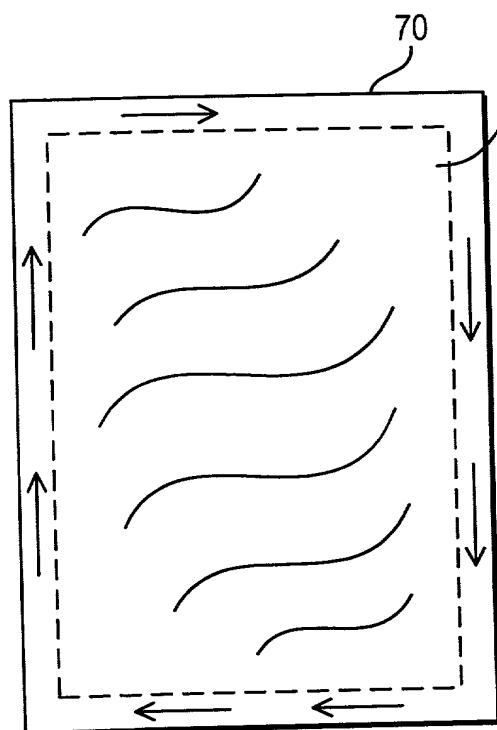
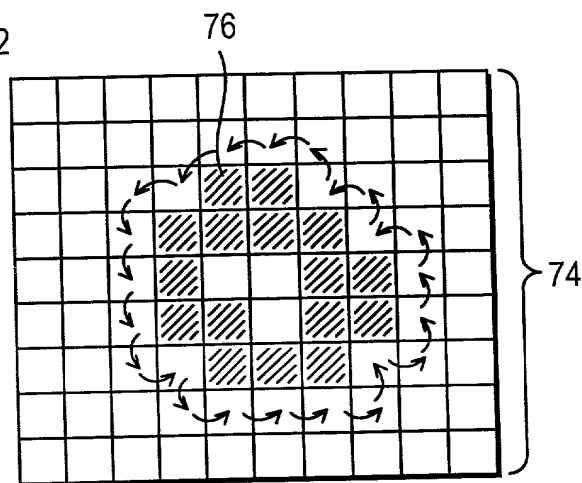


FIG. 5g



EDGE REJECTION

FIG. 6a



HOLE - FILLING

FIG. 6b

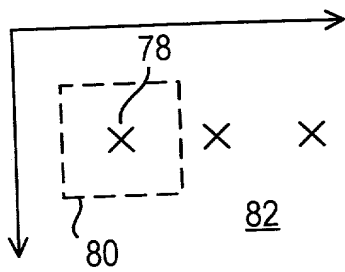


FIG. 7a

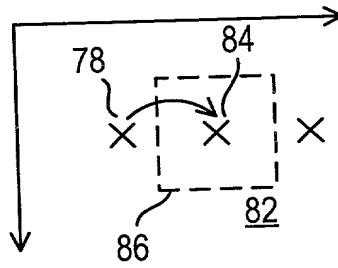


FIG. 7b

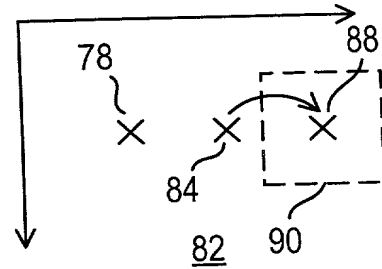


FIG. 7c

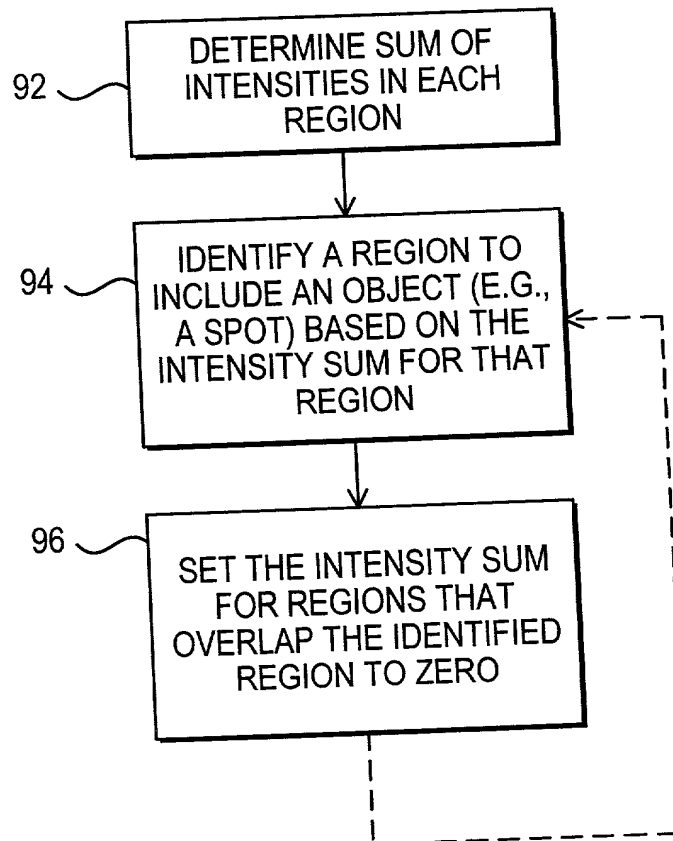


FIG. 8a

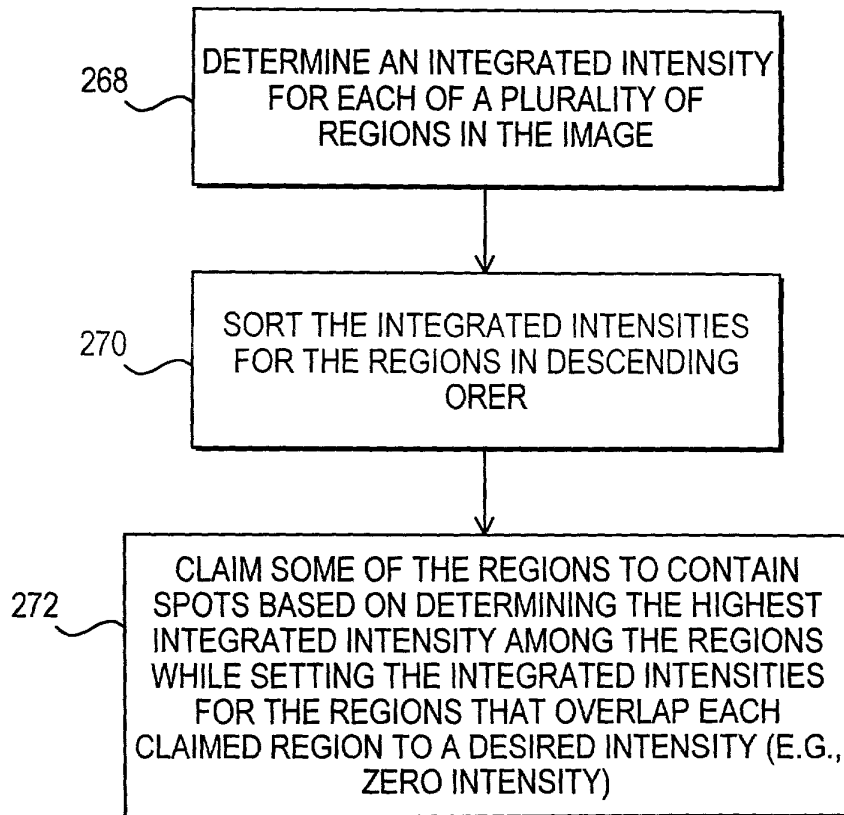


FIG. 8b

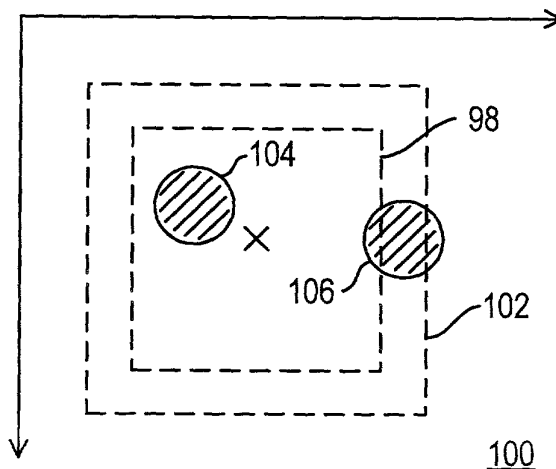


FIG. 9

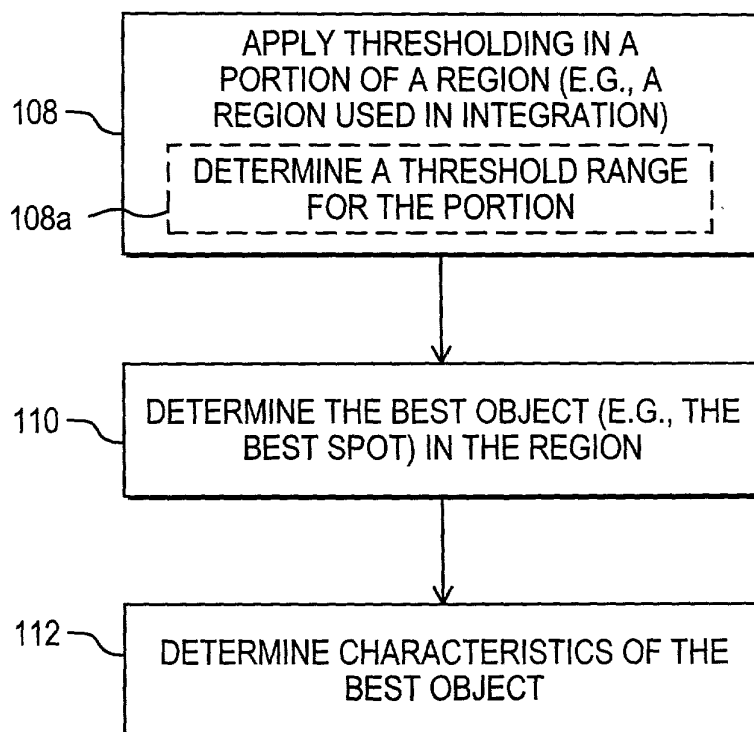


FIG. 10

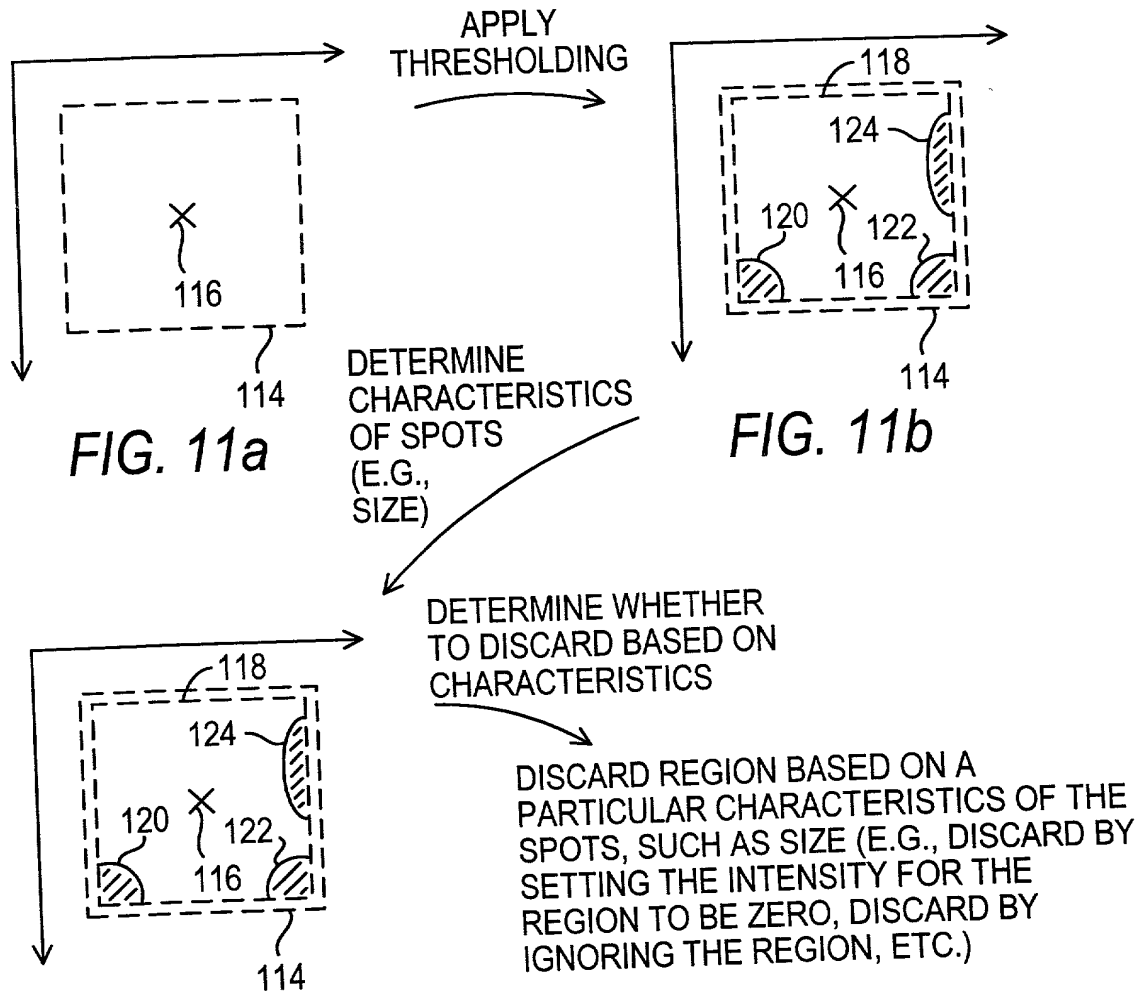


FIG. 11c

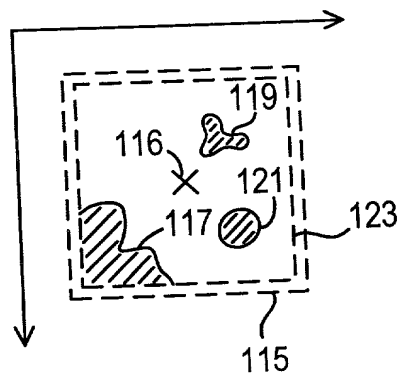
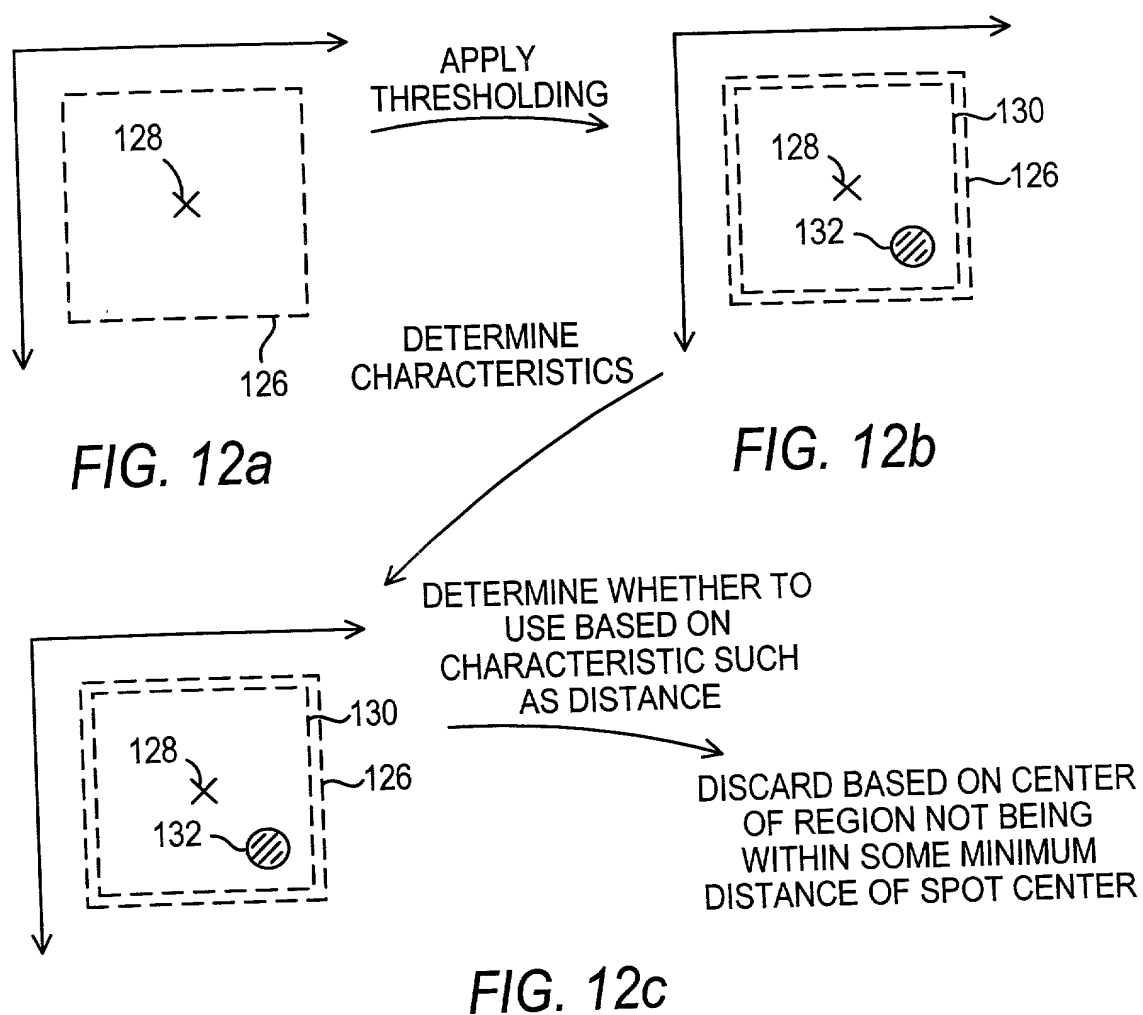


FIG. 11d



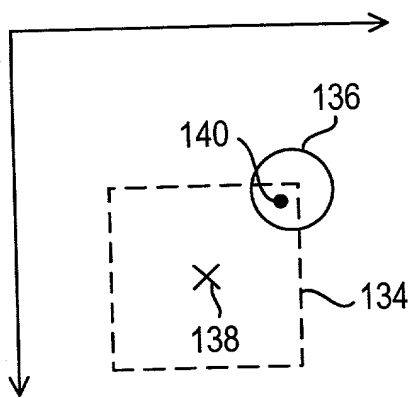


FIG. 13a

MOVE REGION TO
BE CENTERED ON
CALCULATED
SPOT CENTER

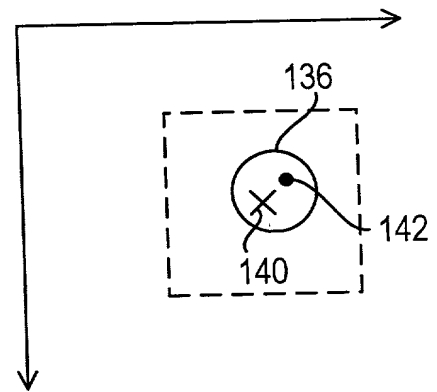


FIG. 13b

MOVE REGION TO BE
CENTERED ON CALCULATED
SPOT CENTER

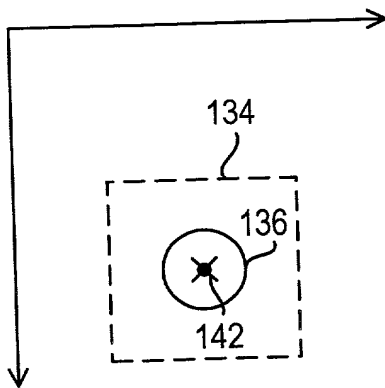
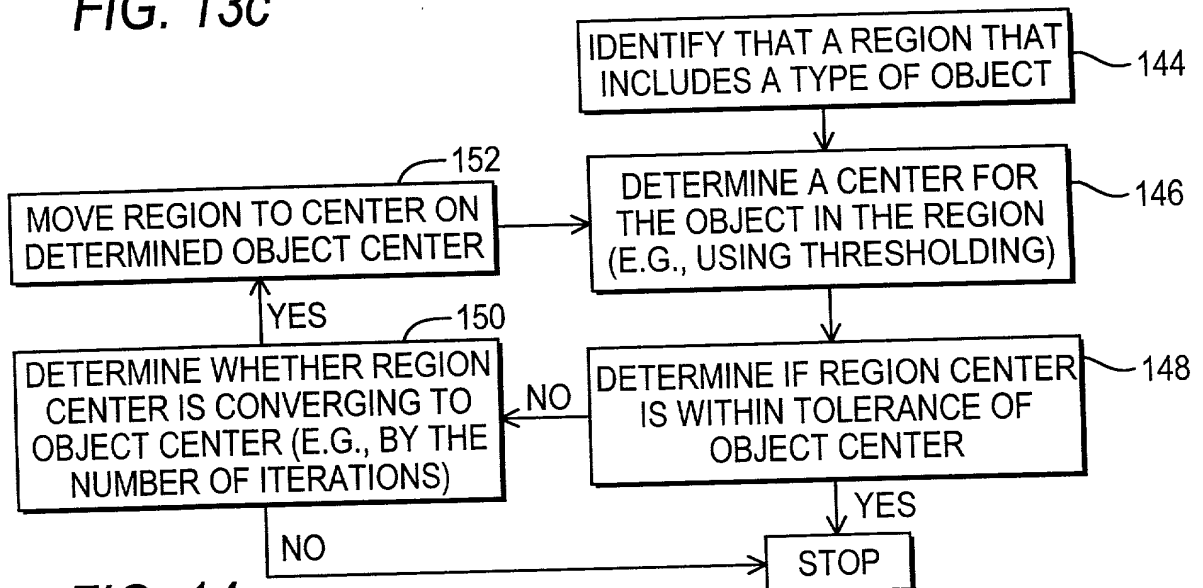


FIG. 13c



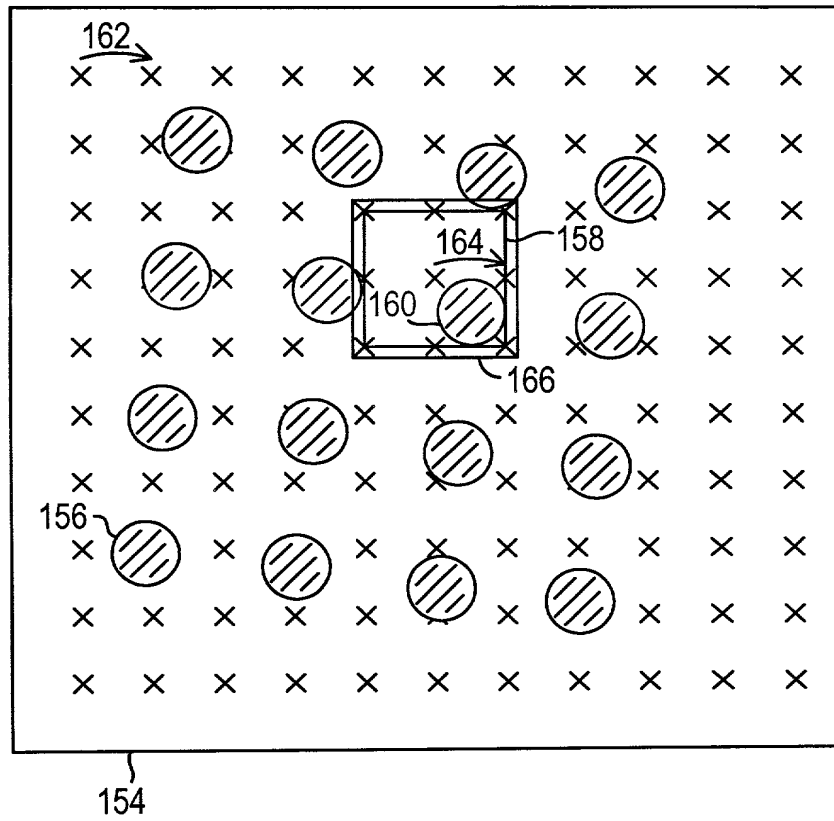
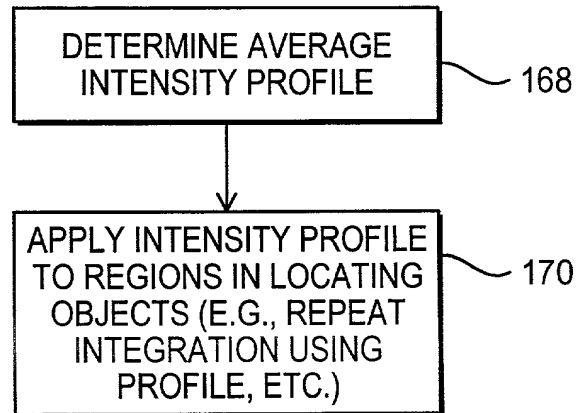


FIG. 15

*FIG. 16*

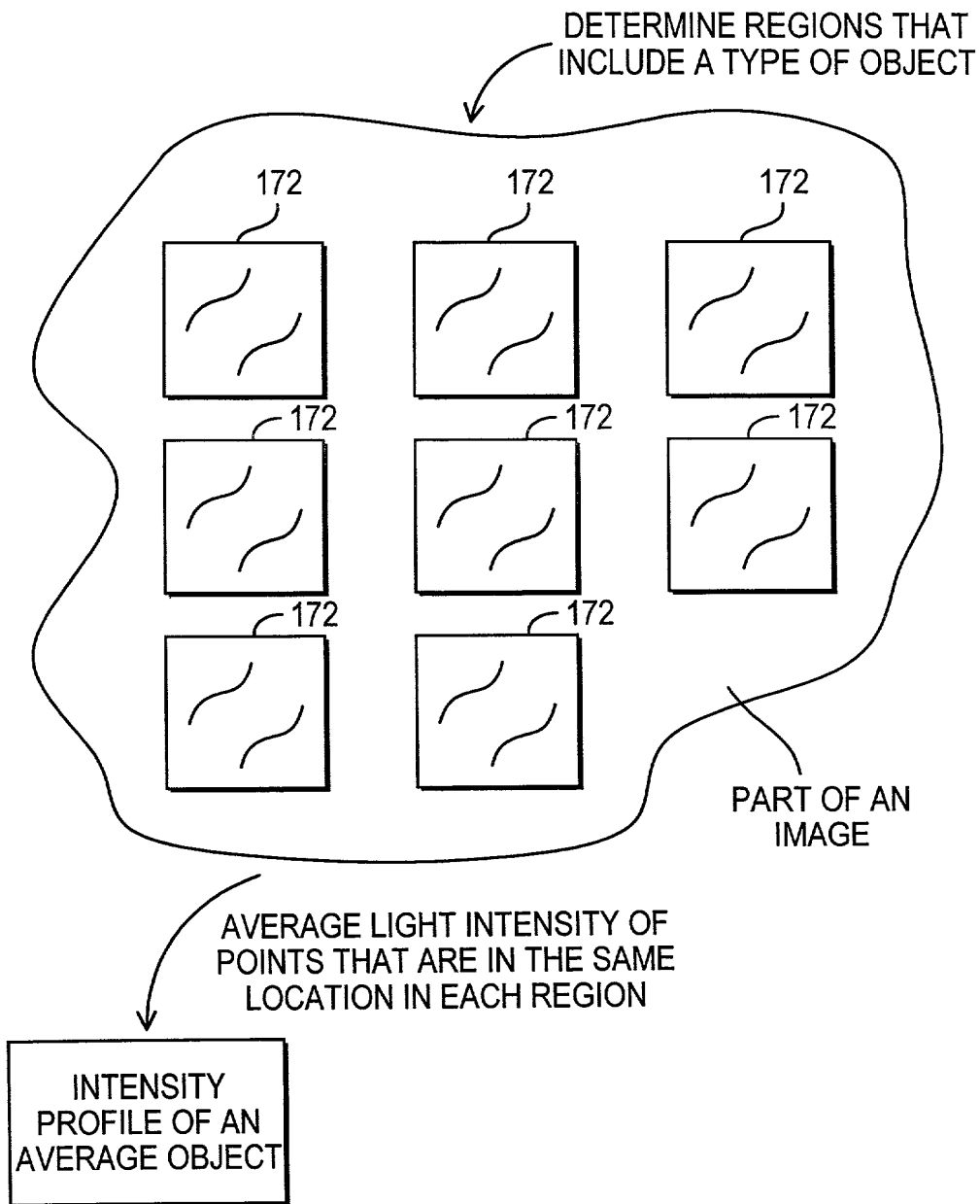
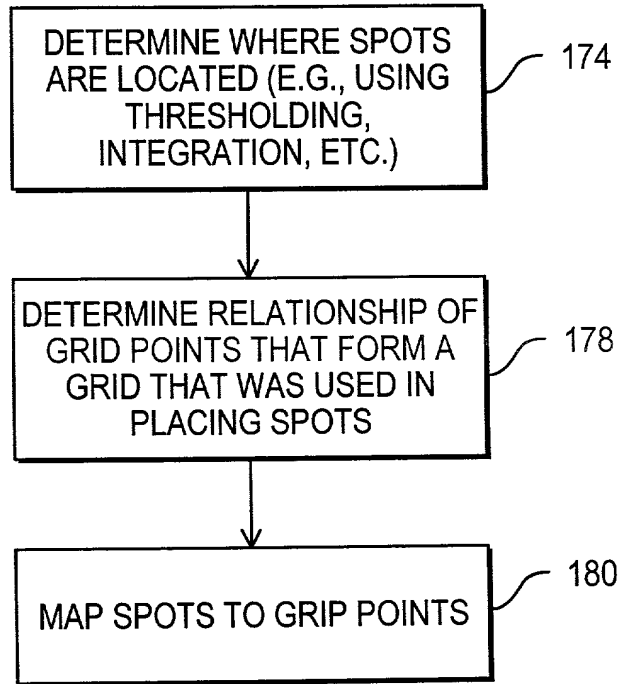
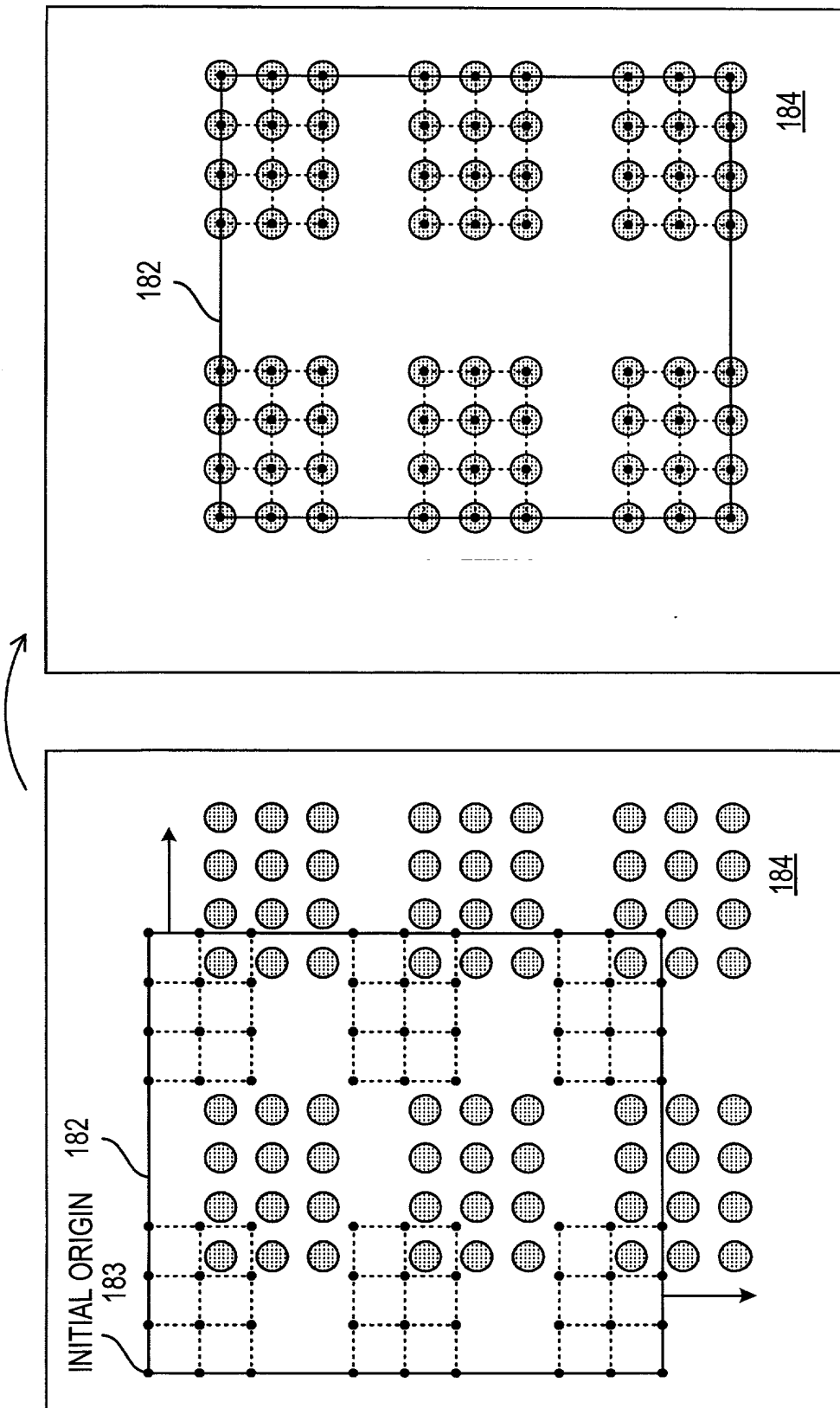


FIG. 17a

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FIG. 17b

*FIG. 18*



BEST ORIGIN FOR GRID FOUND

MOVING GRID ON IMAGE

FIG. 19

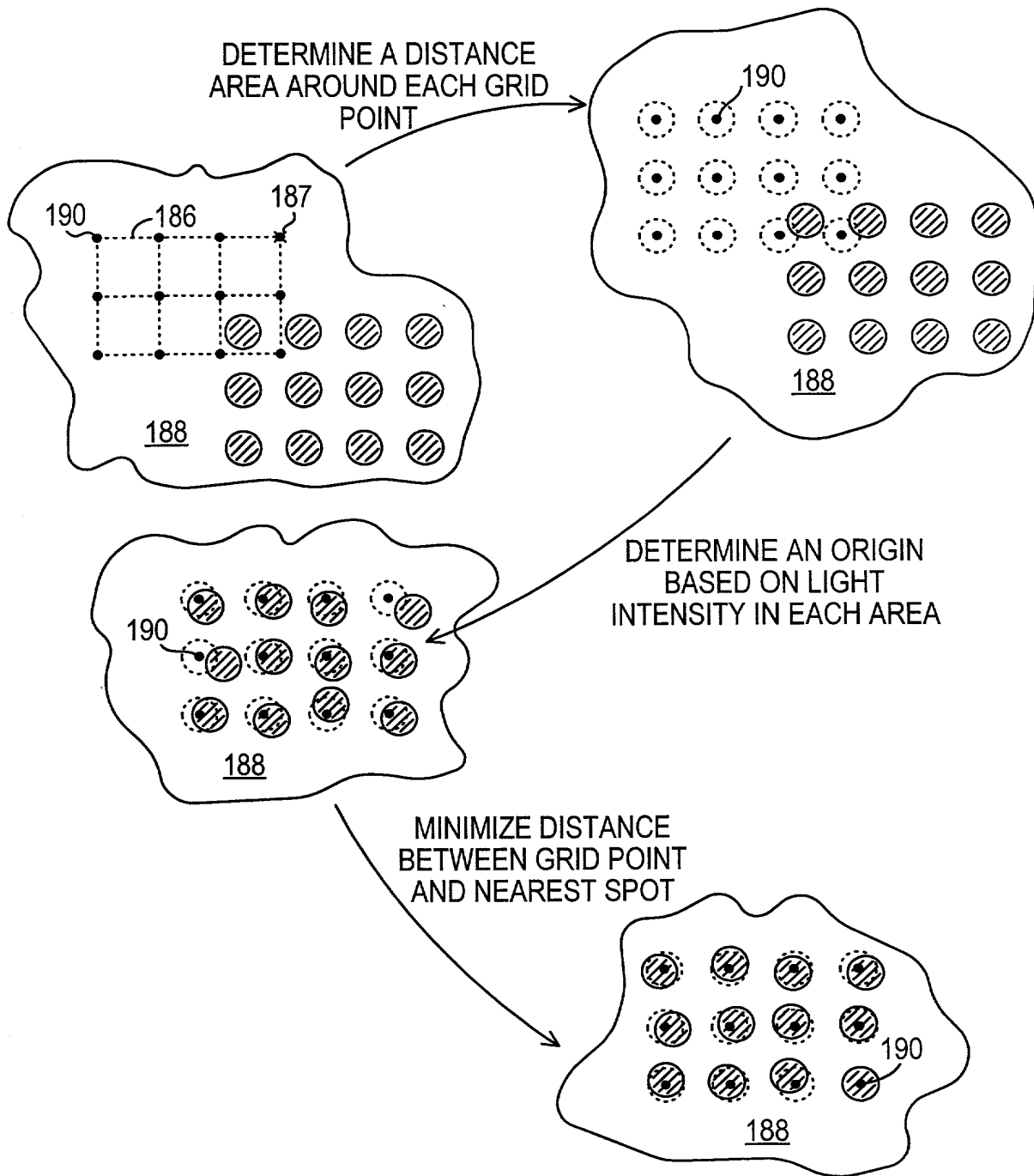
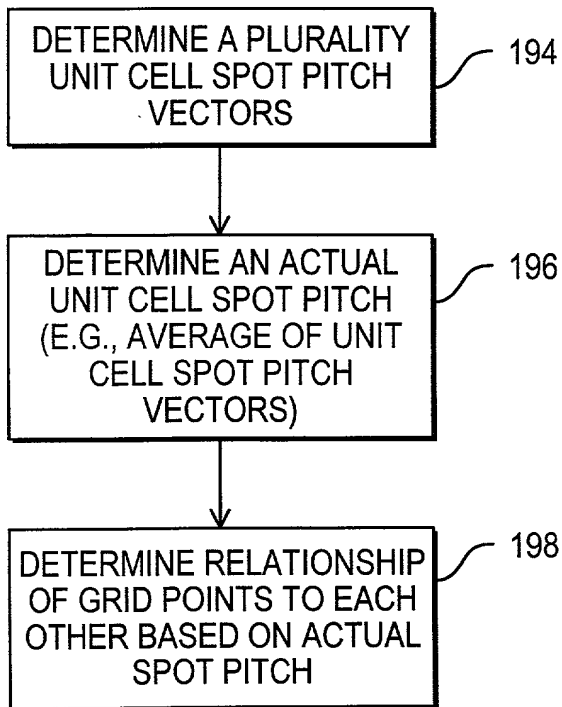
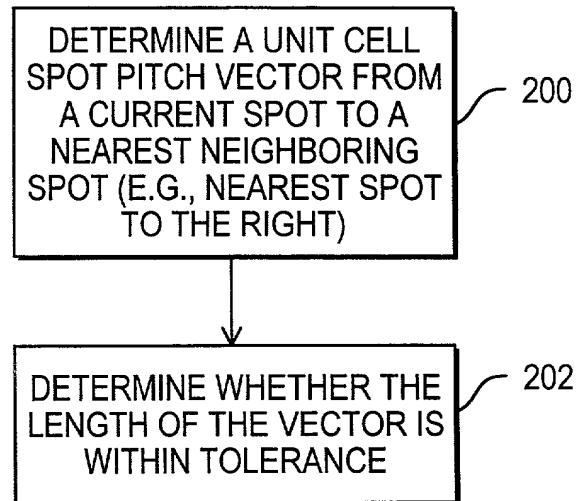


FIG. 20

*FIG. 21**FIG. 22*

NEAREST NEIGHBOR WITHIN
TOLERANCE FOR SPOT PITCH VECTOR

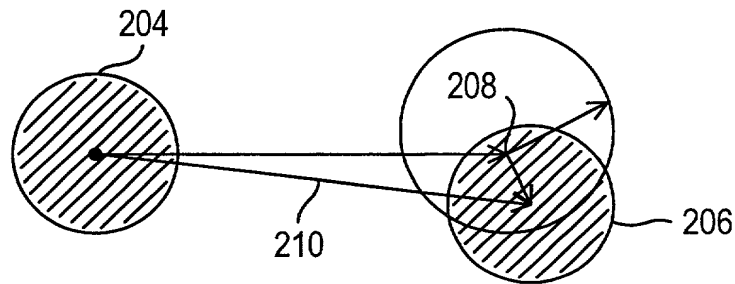


FIG. 23a

NEAREST NEIGHBOR NOT WITHIN
TOLERANCE FOR SPOT PITCH VECTOR

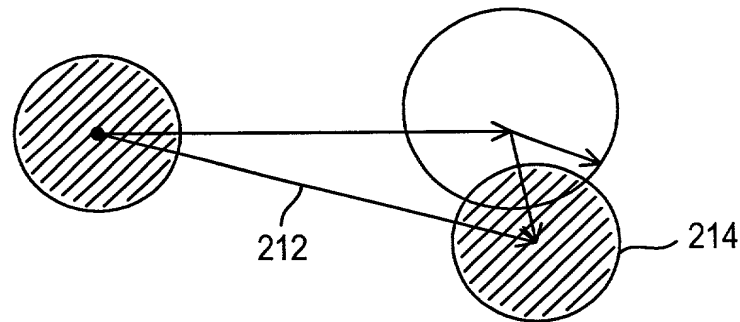
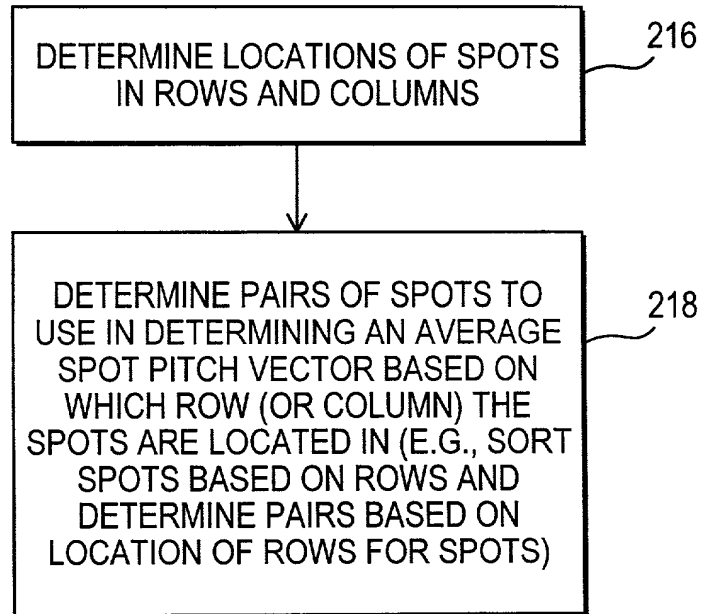


FIG. 23b

*FIG. 24*

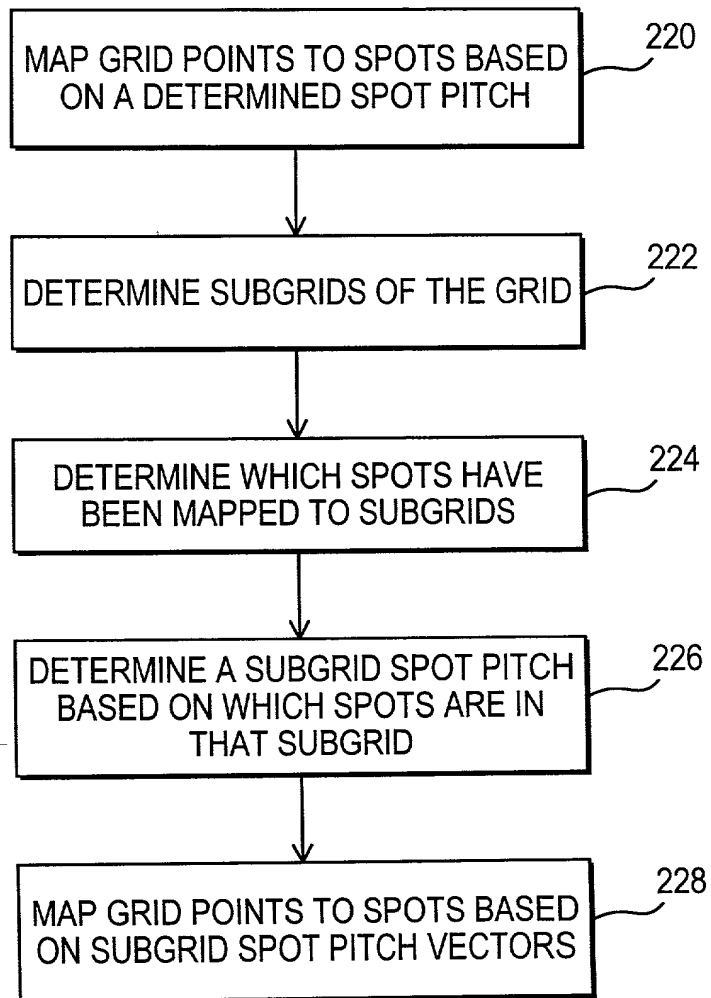


FIG. 25

230
 PROVIDE A SLIDE HAVING A HIGH DENSITY ARRAY OF SPOTS THAT INCLUDES MATERIALS FROM A PLURALITY OF SOURCES (E.G., CANCEROUS AND NONCANCEROUS TISSUE WITH A DIFFERENT FLUORESCENT TAG FOR EACH)

232
 GENERATE IMAGES BASED ON THE SLIDE (E.G., A DIFFERENT IMAGE BASED ON CHARACTERISTICS OF EACH FLUORESCENT TAG) AND LOCATE SPOTS IN EACH IMAGE

234
 ALIGN IMAGES BASED ON LOCATION OF SPOTS (E.G., USING A MATRIX TRANSFORM)

FIG. 26a

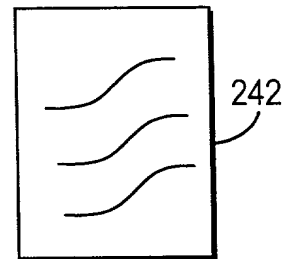


FIG. 27a

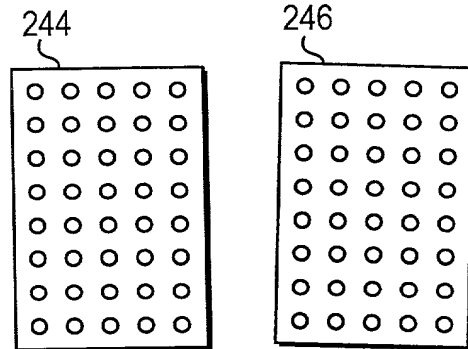


FIG. 27b

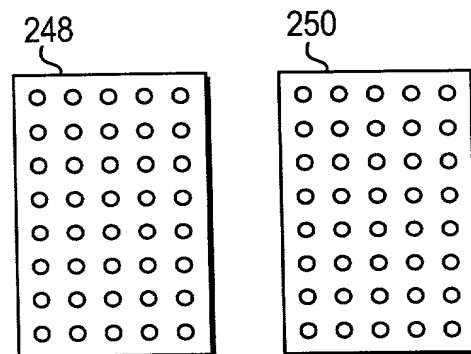


FIG. 27c

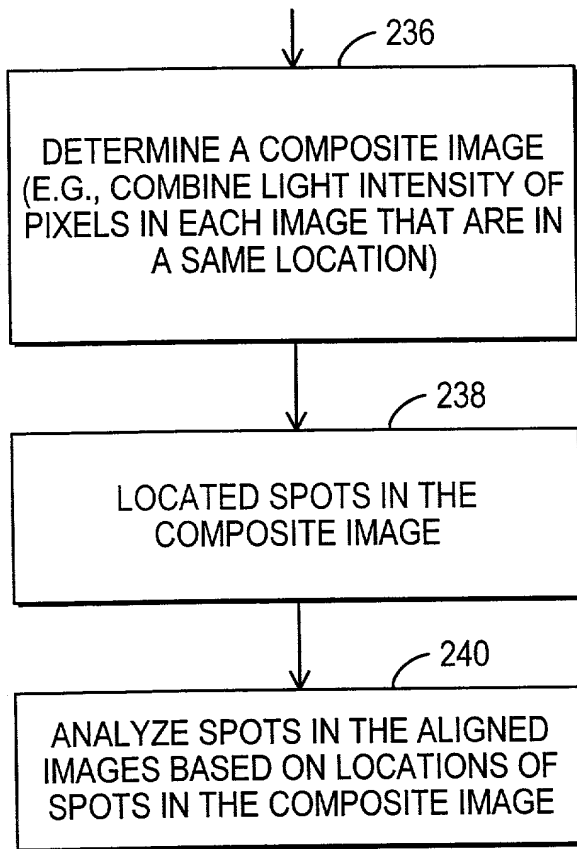


FIG. 26b

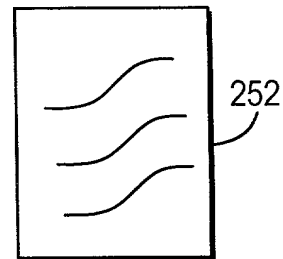


FIG. 27d

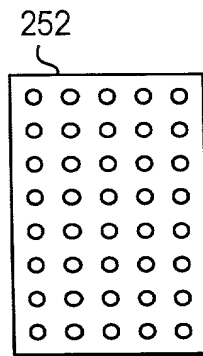


FIG. 27e

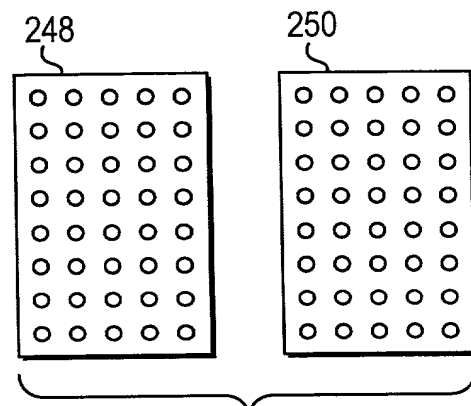
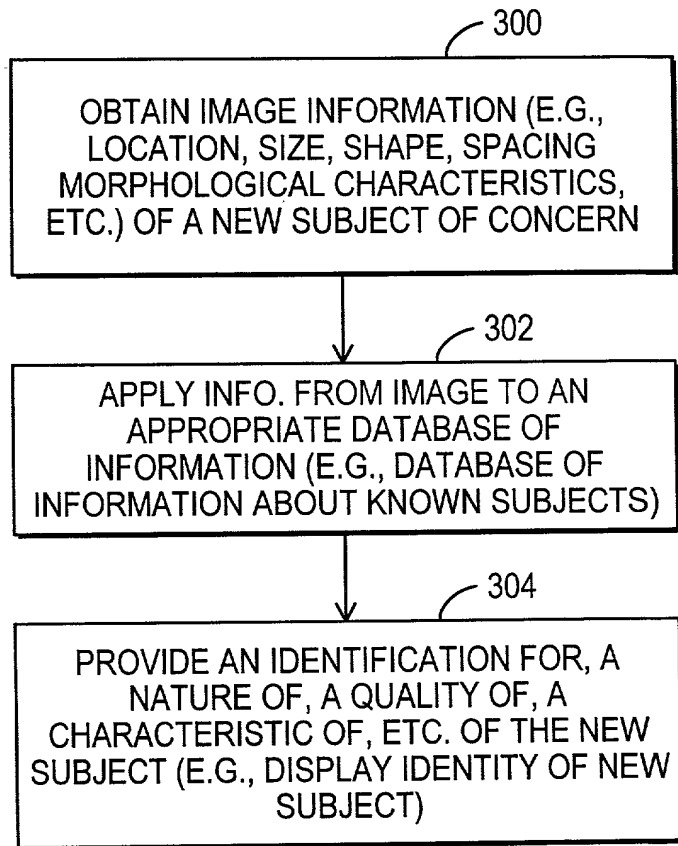


FIG. 27f

*FIG. 28*

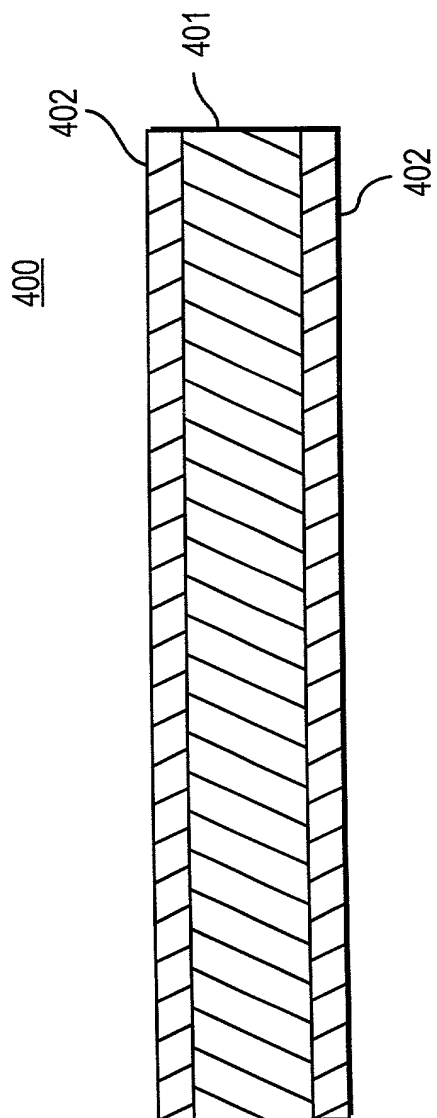


FIG. 29

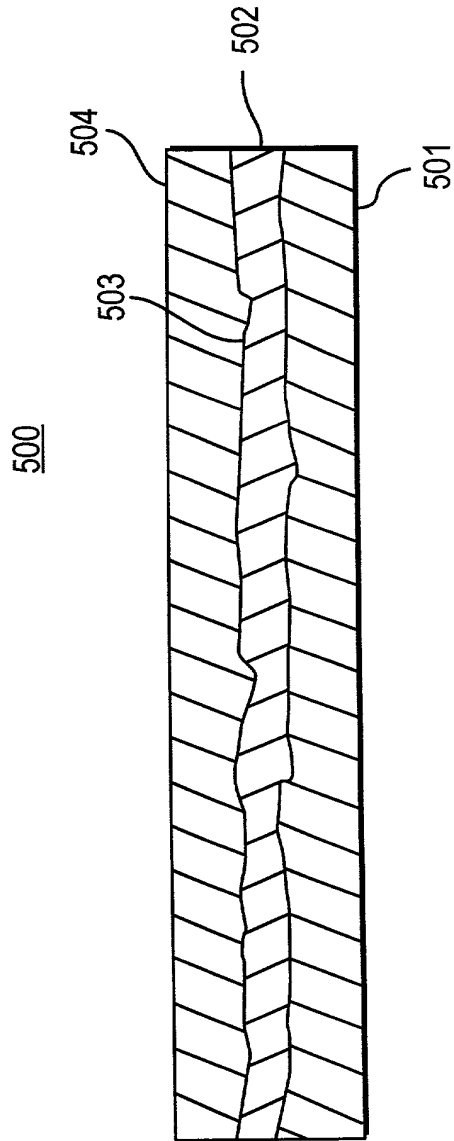


FIG. 30